

ABSTRACT

A guiding device is disclosed for guiding a vehicle to a target position by controlling the steering  
5 angle while estimating the vehicle position at least based on a steering angle value, characterized in that, in estimating the vehicle position, a slowing operation with respect to a change  $dp$  in a moving distance of the vehicle is applied to a turning curvature  $g(Str(p))$   
10 estimated based on the steering angle value in order to compensate for the delay due to tire deformation, whereby the delay-compensated turning curvature  $y(p)$  is obtained.